

### **Remarks**

Applicants thank the Examiner for his careful review of the application.

Applicants note that claims 19-34 have been allowed, and thank the Examiner.

Applicants note that claims 8, 12, and 13 have been identified as being allowable, but for their dependence from a rejected base claim. Applicants thank the Examiner.

### **Allowability of Independent Claim 1**

Independent claim 1 was rejected under 35 U.S.C. §103(a) as being obvious in view of United States Patent Number 5,710,979 ("Tamai") and United States Patent Number 5,541,589 ("Casper"). Applicants respectfully traverse this rejection.

The present application discloses a scheme for identifying nonfunctional two-way radios. For example, a quick service restaurant may employ many two-way radios to facilitate communication throughout the restaurant and drive-through lane. Per such a scenario, a particular two-way radio may simply be set aside when it becomes nonfunctional (e.g., a two-way radio exhausts its battery). Eventually, as additional radios are set aside, the quick service restaurant is without sufficient radios to operate properly. The present application provides a scheme by which nonfunctional radios may be identified, so that they are not simply set aside, until so many radios are set aside that the restaurant cannot operate properly.

Claim 1 reads as follows:

1. A method of identifying nonfunctional two-way radios from among a known group of two-way radios expected to be operating within a region, the method comprising:

for each of the two-way radios expected to be operating within the region, establishing a corresponding window of time;

for each of the established windows of time, awaiting a transmission from the corresponding radio;

if, for a particular radio, no transmission is detected within its corresponding window of time, recording the absence of the transmission; and

if, for a particular radio, the number of times absence of transmission has been recorded exceeds a threshold, identifying the particular radio as nonfunctional.

As can be seen, claim 1 requires that, for each radio within a region, a window of time be established during which a transmission from a particular radio is awaited. If no transmission is received, the absence of the transmission is recorded. If the number of times absence of transmission has been recorded exceeds a threshold (e.g., six times), the particular radio is identified as nonfunctional.

The Office Action acknowledges that Tamai does not teach identifying a radio as being nonfunctional in response to the number of times absence of transmission has been recorded exceeding a threshold. According to the Office Action, this element is taught by Casper.

Casper teaches a method of communication within a data processing complex having many elements (e.g., I/O devices, data storage devices, printers, etc.). Each element has one or more transceivers that send and receive data signals to other elements. Elements in communication with one another are connected by one or more conductors (e.g., an optical fiber). The conductors extend between transceivers in different elements, and serve as a medium through which data is communicated. During initialization, a transceiver in one element attempts to communicate with a transceiver in another element to determine that the conductors are properly connected between the elements. If no response is received, a retry is attempted. There is a maximum number of retries that are attempted before the operation fails. Thereafter, the non-responding transceiver is marked as being "not configured" in a configured-transceiver table.

The premise of the rejection of claim 1 is that marking of a transceiver as being "not configured" is the same as identifying the non-responding transceiver as being nonfunctional.

Applicants point out that the scheme disclosed in Casper does not identify a transceiver as being nonfunctional. At most, the scheme disclosed in Casper is able to determine that the transceiver is "not configured." A transceiver may be classified as "not configured" for a variety of reasons having nothing to do with whether the transceiver is functional or not. For example, someone may unplug a cable extending between transceivers, so that although a transceiver is functional, it cannot respond to responses cannot be received. (See col. 18, line 57). Or someone may hook up a cable so that transceiver number one in a first element is connected to transceiver number 2 in a

second element (i.e., the cables are accidentally crossed). (See col. 10, line 15) ("the node descriptor did not match"). Again, this results in a transceiver being identified as "not configured." Thus, as can be seen, declaration of a transceiver as being "not configured" is not the same as identification of a transceiver as being nonfunctional.

Independent claim 1 requires identification of a radio as being "nonfunctional." Casper simply contains no teaching regarding identifying a radio/transceiver as being nonfunctional. Instead, Casper teaches a method by which a transceiver may be categorized as "not configured"—a category which may include *functional* transceivers. Thus, the combination of Tamai and Casper are insufficient to disclose each of the elements of claim 1, and the rejection of claim 1 under 35 U.S.C. §103(a) should be withdrawn.

#### Allowability of Claims 2-7 and 9-11

Claims 2-7 and 9-11 each depend from claim 1. The rejections of these claims share a common premise: that claim 1 is obvious in view of Tamai and Casper. As discussed above, this premise is false, and the rejection of these claims should be withdrawn. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of these claims.

#### Allowability of Independent Claim 14

Independent claim 14 was rejected under 35 U.S.C. §102(e) as being anticipated by published application US 2002/0137466 ("Bamburak"). Applicants respectfully traverse this rejection.

Independent claim 14 recites a radio that is programmed to emit, at a designated point in time, a transmission containing a code identifying the radio. Prior to the broadcast of the transmission containing the identification code, a transmission protocol governing subsequent transmissions is known by the radio.

Bamburak teaches a method for selecting a wireless communications provider in a region having multiple wireless providers. The passages identified by the Office Action as disclosing the concept of emitting a transmission containing a code identifying the radio relate to the process by which a cellular telephone registers with a service provider

upon power-up. In a previous response, Applicants had argued that at the point in time that a cellular telephone is registering with a service provider, it does not know the transmission protocol governing subsequent transmissions. In response, the Examiner has stated that "it is well known in the art that the call set up overhead information of any wireless system would contain the protocol type of the system in order to technically register with a service provider."

Applicants contend that at the point in time that a cellular telephone is registering with a service provider, it may know the *species* of the transmission protocol, but it does not know the protocol, itself. For example, at the time that a cellular telephone is registering with a service provider, it may know that the network assigns time slots to each cellular telephone (i.e., it may know that the species of the protocol is TDMA), but it does not know which time slot it will actually be assigned (i.e., it does not know the transmission protocol, itself). Claim 14 requires the radio to know the "transmission protocol governing subsequent transmissions"—something not known by the cellular telephones in Bumbarak. Because Bumbarak fails to disclose this element, Bumbarak cannot properly serve as a basis for a rejection of independent claim 14 under 35 U.S.C. §102(e). For this reason, Applicants respectfully request reconsideration and withdrawal of the rejecting of independent claim 14.

#### Allowability of Claims 15-18

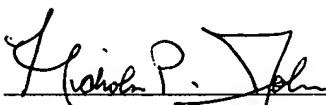
Claims 15-18 each depend from claim 14. The rejections of these claims share a common premise: that claim 14 is anticipated by Bumbarak. As discussed above, this premise is false, and the rejection of these claims should be withdrawn. Therefore, Applicants respectfully request reconsideration and withdrawal of the rejection of these claims.

**Conclusion**

Claims 1-34 remain pending in the application (claims 19-34 have been allowed). These claims are believed to be allowable for the reasons set forth above. This amendment is believed to be responsive to all points raised in the Office Action. Accordingly, Applicants respectfully request prompt reconsideration, allowance, and passage of the application to issue. Should the Examiner have any remaining questions or concerns, the Examiner is urged to contact the undersigned by telephone at the number below to expeditiously resolve such concerns.

Respectfully submitted,

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